

Supplementary Material. Immunohistochemical staining

Sections cut from formalin-fixed paraffin embedded blocks were dewaxed and rehydrated. Endogenous peroxidase activity was blocked using 4% hydrogen peroxidase followed by antigen retrieval by treating with tris-EDTA (pH 9)/citrate (pH 6). Primary monoclonal antibodies for interleukin-7 receptor (IL-7R) (Abnova, MAB21101, 1:50, pH 6), oncostatin (Abcam, Ab198830, 1:400, pH 9) and oncostatin-R β (Santa Cruz, SC-376511, 1: 50, pH6) were used to incubate the sections at 4°C, in a humid chamber overnight. Universal polymer based secondary antibody (Skytek Laboratories, USA) was used, and the reaction product was developed with 3,3'-diaminobenzidine and counterstained with hematoxylin. Appropriate positive and negative controls were used.

Interpretation for IL-7R stain was made on the stromal inflammatory cells including lymphocytes and macrophages. For oncostatin and oncostatin-R β stains expressions were analyzed both in the intestinal epithelial cells as well as the stromal inflammatory cells separately. H scores were calculated for all stains in the corresponding site as mentioned above by multiplying stain intensity and stain distribution, i.e., positive percentage cells out of all cells present in the biopsy fragments. Four distribution grades were employed: 0 = no staining (< 10% cells positivity); 1+ = 11% to 33% of target cell positivity; 2+ = 34% to 66% of target cell positivity; and 3+ = >66% of target cell positivity. Intensity was graded as: 1+ = faint; 2+ = intermediate; 3+ = strong matching the intensity of positive control. The final calculated H scores in different sites were correlated with primary nonresponse and secondary loss of response.